

### **Remarks**

In response to the Office Action mailed on April 19, 2007, the Applicants respectfully request reconsideration in view of the following remarks. In the present application, claims 1, 5, 8, and 11 have been amended. The claims have been amended to clarify that launching the set-up program module comprises installing the logging code in a memory of the computer and setting a registry key in the operating system as an indicator to the application program to load the logging code in addition to signifying user consent to have application program actions logged. The claims have also been amended to clarify that determining if any recordable user interaction performed in the software application program module has occurred includes determining whether a notification has been received by a logging code from any one of a plurality of hooks, wherein each of the plurality of hooks causes an event message to be routed to the logging code for an analysis, the analysis comprising an inspection of the event message to determine whether the event message affects a user interface of the application program module prior to the event message being sent to the application program module. Support for this amendment may be found on page 8, lines 5-7 and on page 9, lines 22-29 in the Specification. No new matter has been added.

Claims 1-8, 10, 11, 19, and 20 are pending in the application. Claim 11 is rejected under 35 U.S.C. § 101 for being directed to non-statutory subject matter with respect to the recited limitation of a computer-readable medium. Claim 8 is rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Claims 1, 3, 4, and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Terry (6961765), Gruyer et al. (2002/0112048, hereinafter “Gruyer”) in further view of Raveis, JR. (2001/0047282, hereinafter “Raveis) in further view of

Achiwa et al. (2003/0009438, hereinafter "Achiwa"). Claims 2, 5, 6, 10, 11, 19, and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Terry, Gruyer, Raveis and Achiwa and in further view of Burgess et al. (5796633, hereinafter "Burgess"). Claim 7 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Terry, Gruyer, Raveis, Achiwa and Burgess in further view of Jawahar et al. (6256620, hereinafter "Jawahar").

### **Applicants' Statement of the Substance of the Interview**

A telephonic interview between the undersigned representative for the Applicants and the Examiner was held on October 5, 2007 to discuss rejections to the claims under 35 USC 101 and 112, first paragraph, as well as proposed amendments to independent claims in view of the cited references of record submitted to overcome rejections under 35 USC 103(a). In the interview, the Examiner agreed that proposed amendments to claims 8 and 11 appeared to overcome the aforementioned 101 and 112 rejections. With respect to the pending rejections under 35 USC 103(a), the Examiner agreed that the proposed amendments appeared to overcome said rejections and thus further prosecution, but indicated that further consideration and/or search would be required.

### **Claim Rejections - 35 U.S.C. §101**

Claim 11 is rejected under 35 U.S.C. § 101 for being directed to non-statutory subject matter with respect to the recited limitation of a computer-readable medium which is interpreted by the Examiner to include computer readable media comprising a non-statutory transmission medium, signals and waves. In response, claim 11 has been amended to recite a computer-readable hardware storage medium for which support is provided in the specification on page 5, lines 15-30. Thus, it is respectfully submitted

that amended claim 11 is directed to statutory subject matter. Therefore, the rejection of claim 11 under 35 U.S.C. § 101 should be withdrawn.

#### **Claim Rejections - 35 U.S.C. §112**

Claim 8 is rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement for containing the limitation “renaming the logging file comprises renaming the logging file with a random number before uploading the logging file to the remote analysis server” which is alleged to be contrary to the description of renaming a logging file in the specification. In response, claim 8 has been amended to remove the language “before uploading the logging file to the remote analysis server.” Thus, it is respectfully submitted that amended claim 8 complies with the written description requirement. Therefore, the rejection of claim 8 under 35 U.S.C. § 112, first paragraph, should be withdrawn.

#### **Claim Rejections - 35 U.S.C. §103**

##### Claims 1, 3, 4, and 8

Claims 1, 3, 4, and 8 are rejected as being unpatentable over Terry in view of Gruyer in further view of Raveis in further view of Achiwa. The rejection of these claims is respectfully traversed.

Amended independent claim 1 specifies a client-side system stored on a computer, wherein the client-side system logs, in a logging file, a plurality of user interactions performed in an application program module and periodically uploads the logging files to a remote server system for analysis of the logging file. The client-side system includes a logging code in communication with the application program module, wherein the logging code comprises a plurality of hooks into the application program

module and an operating system of the computer, wherein when a user performs any recordable action within an application program, one of the plurality of hooks is triggered and a data record is generated; a logging file in communication with the logging code, wherein the logging code stores the data record in the logging file; a script file in communication with the logging file, wherein the script file is operative to upload the logging file to the remote server system, wherein uploading the logging file to the remote server system comprises opening an Active Data Object (ADO) session with the remote server system, renaming the logging file with a random number therein preventing duplication of a logging file name at the remote server system and placing the logging file into an ADO database record set; and a set-up program module, wherein launching the set-up program module comprises installing the logging code in a memory of the computer, setting a registry key in the operating system as an indicator to the application program to load the logging code, and signifies user consent to have application program actions logged.

Terry discusses a method of detecting states that are activated by internal computer unit environment, which include: (a) monitoring the active window task manager for all identifiable window handles; (b) intercepting all operating system messages which are transmitted between third-party applications (programs) and the O/S; (c) detecting any change in a critical O/S file or third-party start-up file; (d) detecting any change in a critical aspect of the registry; (e) sending a inner-process communications message to any identifiable window handle which resides within the active task manager; (f) sending a real time forensic report to a monitor station defining the state of the detection. (See Terry column 4, lines 40-52.) Terry discusses a parallel thread that

activates an independent 32 bit API DLL (505), to establish a "hook" into the actual O/S kernel. (See Terry column 13, lines 42-52.) Terry also discusses that a parallel thread is initiated to poll the status of the network connection and to ensure all proper pathways are established for the client application 110 to communicate with administrative application 115. (See Terry column 15, lines 39-42.) Terry further discusses that a registry key is opened as part of an analysis to determine unauthorized changes within a particular segment of the registry (i.e., HKEY\_LOCAL\_MACHINE:Software/Microsoft). The analysis includes a method opening the physical registry key and opening and querying the segment for any possible unauthorized changes. (See Terry column 19, lines 19-50). Terry further discusses initiating a parallel thread which will initiate a series of sub-threads, which collect registry information throughout various defined segments of the computer registry. The parallel thread is activated during the initial installation or re-initialization if the computer is updated with new authorized software. (See Terry column 9, lines 60-67).

Gruyer discusses a method and system for analyzing the detailed behavior of the users browsing the World Wide Web. The behavioral information may be provided to businesses interested in knowing how users behave when using certain web services. (See Gruyer paragraph [0009].) Gruyer also discusses that when a user 102 consents to being monitored, the user is enabled to download and install the agent software 106 on a user device 108, e.g., a workstation or a desktop computer. (See Gruyer paragraph [0009].)

Raveis discusses a system and method for managing real estate transactions over a distributed computer network. (See Raveis paragraph [0009].) Raveis discusses that

Microsoft's Active Data Objects ("ADO") version 2.0 is used to establish database connectivity between the business objects and the database. (See Raveis paragraph [0197].)

The Office Action acknowledges that the combination of Terry, Gruyer, and Raveis fails to disclose renaming the logging file with a random number therein preventing the duplication of a logging file name at the remote server system. It is further respectfully submitted that the combination of Terry, Gruyer, and Raveis fails to teach, disclose, or suggest that launching the set-up program module comprises installing the logging code in a memory of the computer and setting a registry key in the operating system as an indicator to the application program to load the logging code.

In particular, Terry discusses the utilization of a computer registry and registry key to determine unauthorized changes within a particular segment of the registry (see Terry column 19, lines 19-50) and the utilization of a parallel thread to collect computer registry information. Terry however, fails to teach, disclose or suggest the setting of a registry key in the operating system as an indicator to the application program to load logging code, as specified in amended claim 1. Gruyer and Raveis, discussed above, also fail to teach, disclose, or suggest this feature.

Achiwa, relied upon in the Office Action for allegedly curing the deficiencies of Terry, Gruyer, and Raveis, discusses providing a means for specifying an object of remote copy for a networked attached storage at detailed levels. A storage system for accepting that a file request has remote copy information and specifying a destination of remote copy in units of a file or directory. The storage system receives a write request of a file, determines whether the file for which the write request is issued is an object of

remote copy on the basis of the remote copy information, and if so, executes a remote copy operation to a remote copy destination acquired from the remote copy information. See paragraphs 0013-0014. Files which failed in remote copy are stored in an emergency volume and the files have randomly generated file names to prevent identical file names in the emergency volume. See paragraph 0065.

As may be discerned from the discussion of Achiwa, above, Achiwa fails to cure the deficiencies of Terry, Gruyer, and Raveis in that the reference does not teach, disclose, or suggest the setting of a registry key as an indicator to the application program to load the logging code as is recited in amended claim 1.

Based on the foregoing, the combination of Terry, Gruyer, Raveis, and Achiwa fails to teach, disclose, or suggest each of the features specified in amended claim 1. Therefore, amended claim 1 is allowable and the rejection of this claim should be withdrawn. Claims 3-4 depend from amended claim 1, and are thus allowable for at least the same reasons. Therefore, the rejection of these claims should also be withdrawn. Claim 8 depends from claim 7 which depends from amended claim 5. Claims 5 and 7 also stand rejected as being unpatentable over the aforementioned combination of references in addition to the Burgess reference (claim 5) and the Jawahar reference (claim 7). The rejection of claim 8 will be discussed in connection with the discussion of claims 5 and 7, below.

Claims 2, 5, 6, 10, 11, 19, and 20

Claims 2, 5, 6, 10, 11, 19, and 20 are rejected as being unpatentable over Terry in view of Gruyer in further view of Raveis in further view of Achiwa and in further view of Burgess. The rejection of these claims is respectfully traversed.

Claim 2 depends from amended claim 1 and thus specifies at least the same features. As discussed above, the combination of Terry, Gruyer, Raveis, and Achiwa fails to teach, disclose, or suggest each of the features of amended claim 1.

Burgess discusses monitoring the performance of a computer coupled to a computer network and generating an alert when the performance of the computer has reached an alertable level. The computer is monitored for performance data which is automatically sent over the computer network to a second computer for logging to a performance database. See col. 2, lines 21-34.

Burgess, however, fails to cure the deficiencies in the combination of Terry, Gruyer, Raveis, and Achiwa (discussed above), in that the reference fails to teach, disclose, or suggest the setting of a registry key as an indicator to the application program to load the logging code as is recited in claim 2 (based on its dependency on claim 1). Therefore, claim 2 is allowable for at least the foregoing reasons and the rejection of this claim should be withdrawn.

Amended claim 5 specifies a computer-implemented method for tracking a plurality of user interactions performed in a software application program module stored on the user's computer. The method includes allowing a user to determine if they wish to have interactions with the software application program module logged; determining if any recordable user interaction performed in the software application program module has occurred by determining whether a notification has been received by a logging code from any one of a plurality of hooks, wherein each of the plurality of hooks causes an event message to be routed to the logging code for an analysis, the analysis comprising an inspection of the event message to determine whether the event message affects a user



interface of the application program module prior to the event message being sent to the application program module; recording the user interaction in a logging file on the computer; determining that a scheduled event is triggered during a predetermined time period; opening an Active Data Object (ADO) session with the remote analysis server; renaming the logging file to prevent duplication of a logging file name at the remote server system; placing the logging file into an ADO database record set; and in response to the scheduled event triggering during the predetermined time period, determining whether the logging file exists, and, if so, then uploading the logging file to a remote analysis server, wherein uploading the logging file comprises posting the ADO database record set to the remote analysis server.

As acknowledged in the Office Action, the combination of that Terry, Gruyer, and Burgess fail to teach or suggest opening an Active Data Object (ADO) session and placing a logging file into an ADO database record set. It is also respectfully submitted that the aforementioned combination of references also fails to teach, disclose, or suggest determining whether a notification has been received by a logging code from any one of a plurality of hooks, wherein each of the plurality of hooks causes an event message to be routed to the logging code for an analysis, the analysis comprising an inspection of the event message to determine whether the event message affects a user interface of the application program module prior to the event message being sent to the application program module, as recited in amended claim 5, based on the discussion above.

Furthermore, it is also respectfully submitted that neither Raveis nor Achiwa, relied upon in the Office Action for allegedly curing the deficiencies of Terry, Gruyer, and Burgess, teaches discloses or suggests determining whether a notification has been

received by a logging code from any one of a plurality of hooks, wherein each of the plurality of hooks causes an event message to be routed to the logging code for an analysis, the analysis comprising an inspection of the event message to determine whether the event message affects a user interface of the application program module prior to the event message being sent to the application program module, as recited in amended claim 5. In particular, Raveis, as discussed above, is merely concerned with managing real estate transactions over a distributed computer network through the use of data objects (i.e., Microsoft's Active Data Objects ("ADO")) to establish database connectivity between the business objects and the database. Thus, Raveis fails to disclose the analysis of event messages sent from a plurality of hooks to a logging code. Similarly, Achiwa, as discussed above, is merely concerned with remote copy information details and the storage of files in a networked attached storage (NAS). Thus, Achiwa also fails to cure the deficiencies of Terry, Gruyer, Burgess, and Raveis.

Based on the foregoing, the combination of Terry, Gruyer, Raveis, Achiwa, and Burgess fails to teach, disclose, or suggest each of the features specified in amended claim 5. Therefore, amended claim 5 is allowable and the rejection of this claim should be withdrawn. Claims 6, 10, 11, 19, and 20 depend from amended claim 5, and are thus allowable for at least the same reasons. Therefore, the rejection of these claims should also be withdrawn.

#### Claims 7 and 8

Claim 7 is rejected as being unpatentable over Terry in view of Gruyer in further view of Raveis in further view of Achiwa in further view of Burgess and in further view of Jawahar. Claim 8 is rejected as being unpatentable over Terry in view of Gruyer in

further view of Raveis and in further view of Achiwa. The rejection of these claims is respectfully traversed.

Claim 7 depends from amended claim 5 and thus specifies at least the same features. As discussed above, the combination of Terry, Gruyer, Raveis, Achiwa and Burgess fails to teach, disclose, or suggest each of the features of amended claim 5

Jawahar, relied upon in the Office Action for allegedly curing the deficiencies of Terry, Gruyer, Raveis, Achiwa, and Burgess, discusses a system that monitors the access of information by an individual or system. An access monitoring application monitors information accessed by an information accessing system. Data received from the information accessing system identifies the information accessed which may include information stored in web pages. See col. 2, lines 1-15.

As may be discerned from the discussion of Jawahar, above, the reference fails to contemplate or suggest, in monitoring the access of information, determining whether a notification has been received by a logging code from any one of a plurality of hooks, wherein each of the plurality of hooks causes an event message to be routed to the logging code for an analysis, the analysis comprising an inspection of the event message to determine whether the event message affects a user interface of the application program module prior to the event message being sent to the application program module, as recited in claim 7.

Based on the foregoing, Jawahar fails to cure the deficiencies in the combination of Terry, Gruyer, Raveis, Achiwa, and Burgess. Therefore, claim 7 is allowable for at least the foregoing reasons and the rejection of this claim should be withdrawn.

Amended claim 8 depends from claim 7 and thus specifies at least the same features. As discussed above, the combination of Terry, Gruyer, Raveis, Achiwa, Burgess, and Jawahar fails to teach, disclose, or suggest each of the features of claim 7. Therefore, amended claim 8 is also allowable for at least the same reasons and the rejection of this claim should be withdrawn.

### **Conclusion**

In view of the foregoing amendments and remarks, this application is now in condition for allowance. A notice to this effect is respectfully requested. If the Examiner believes, after this amendment, that the application is not in condition for allowance, the Examiner is invited to call the Applicants' attorney at the number listed below.

Please grant any extensions of time required to enter this response and charge any additional required fees to our deposit account 13-2725.

Respectfully submitted,

MERCHANT & GOULD P.C.  
P.O. Box 2903  
Minneapolis, Minnesota 55402-0903  
(404) 954-5100

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/Alton Hornsby III/  
Alton Hornsby III  
Reg. No. 47,299

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